

THREE NEW SNAILS FROM THE HILLS OF CALIFORNIA

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Redlands, California

MICRARIONTA (EREMARIONTA) MORONGOANA, n. sp.

Diagnosis: Shell helicoid, of moderate size and thickness, depressed-conic; the whorls usually $4\frac{1}{2}$ or $4\frac{3}{4}$, rapidly enlarging, the last tumid and descending parietally. Aperture large, oval, oblique, the peristome distinctly thickened and everted, especially at the columella. Umbilicus moderate, its diameter contained usually about 9 or 10 times in that of the shell. Embryonic shell studded with numerous strong hyphen-shaped papillae arranged in forward-slanting lines, this ornamentation giving way on subsequent whorls to a more minute and less definite papillation which becomes wholly obsolete before the formation of the body-whorl. Periostracum thin and polished, the coloration generally similar to that of other species of the group and with a conspicuous brown band bordered by lighter areas, but the interior is more or less ochraceous.

Max. diam. 20.1, alt. 11.1, diam. umbilicus 2.5 mm.

Type: Cat. No. 6500 of the author's collection.

Type locality: Gulch on north side of Morongo Pass, 2 miles below the Moreongo Inn, Colorado Desert, California (E. P. & E. M. Chace).

Remarks: This interesting and very distinct species shows some affinity with the *indioensis-wolcottiana* group of the genus, but differs in its tumid body-whorl, expanded aperture, and ochraceous interior.

MICRARIONTA (EREMARIONTA) BORREGOENSIS, n. sp.

Diagnosis: Shell helicoid, large for the group and fairly thick, depressed-conic; whorls about 5, convex, with the last moderately descending parietally. Aperture rounded, oblique. Peristome little thickened and but slightly everted except at the umbilicus; the latter wide, a little less than $\frac{1}{7}$ the diameter of the shell. Embryonic whorls microscopically heavily papillose, the periostracum otherwise de-

void of sculpturing. Color of shell light brownish fawn, with a conspicuous brown spiral band margined lighter.

Max. diam. 22.0, alt. 11.8, diam. umbilicus 2.5 mm.

Type: Cat. No. 6913 of the author's collection.

Type locality: Palm Canyon, west side of Borrego Valley, San Diego County, California (F. M. Reed, L. M. Klauber, et al).

Remarks: This is an entirely distinct *Eremarionta* unlike any of the forms from the California deserts hitherto described, as well as being one of the largest. It is exceeded in size only by the much more rotund *M. wolcottiana* (Bartsch).

HELMINTHOGLYPTA TUDICULATA KERMENSIS, n. subsp.

Diagnosis: Shell helicoid, large, low rounded-conic, tumid, rather thin, heavily malleated above as in *tudiculata* s. s. and similar in most respects to the typical race as found in the vicinity of San Diego except that the shell is more depressed and is *conspicuously umbilicate*, the umbilicus only a trifle covered by the columellar reflection of the peristome.

Max. diam. 30.4, alt. 19.7, diam. umbilicus 2.7 mm.

Type: Cat. No. 6863 of the author's collection.

Type locality: Under moist logs, Poso Creek, Kern Co., Calif. (L. G. Ingles and M. Smith).

Remarks: This large, conspicuously umbilicate and malleate race of the most widespread southern Californian helicoid appears to be a common and characteristic form in Kern County and is at hand from many localities there. It seems strange that no racial name has ever been attached to it. It will be dealt with more fully, as also the two preceding species, in certain more extended papers now in preparation.